

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

LOUISVILLE GAS AND ELECTRIC COMPANY)	
)	
_____)	
ALLEGED VIOLATION OF COMMISSION)	CASE NO. 97-376
REGULATIONS 807 KAR 5:006 AND 807 KAR 5:041)	

O R D E R

Louisville Gas and Electric Company ("LG&E"), a Kentucky corporation which engages in the distribution of electricity to the public for compensation for lights, heat, power, and other uses, and which was formed under KRS 279.010 to 279.220, is a utility subject to Commission jurisdiction. KRS 278.010; KRS 279.210.

KRS 278.280(2) directs the Commission to prescribe rules and regulations for the performance of services by utilities. The Commission has promulgated 807 KAR 5:006, Section 24, which requires each utility to adopt and execute a safety program. LG&E has executed such a safety program by programming its own safety manual adopted as "LG&E Safety Resource Handbook."

Commission Staff has submitted to the Commission a Utility Accident Investigation Report dated February 3, 1997, appended hereto, which alleges:

1. On January 27, 1997, Walter J. Jackson, was fatally injured while performing maintenance of number 4A1 condenser at LG&E Mill Creek Generating Station by "shooting darts" to clean the condenser tubes.

2. At the time of the incident, Mr. Jackson and Don Sanders were cleaning the condenser tubes, Mr. Jackson was shooting the darts into the tubes inside the condenser and Mr. Sanders was observing from the outside. Mr. Jackson was working while standing upon a platform constructed of two 2x10 pieces of wood. After approximately 25 minutes of performing this task, Mr. Jackson collapsed, falling through an opening of approximately three feet left uncovered between the platform and the condenser wall. He fell about six feet to the metal grid covering the butterfly inlet valve. Apparently, Mr. Jackson then fell from the grating into a pool of water at the bottom of the condenser.

3. The failure of LG&E to have written maintenance procedures for the cleaning of the condenser is a probable violation by LG&E of Commission Regulation 807 KAR 5:006, Section 24.

4. The failure of LG&E to provide, or have in place, gas analyzers or warning instrument, portable communication equipment and the failure to provide a suitable work platform, is a probable violation by LG&E of Commission Regulation 807 KAR 5:006, Section 24.

5. The absence of fall protection equipment, pursuant to LG&E's own handbook, represents a probable violation by LG&E of Commission Regulation 807 KAR 5:006, Section 24.

6. Furthermore, LG&E had not explained any safety procedures to Mr. Jackson prior to his beginning the job which is a probable violation of Commission Regulation 807 KAR 5:006, Section 24.

Based on its review of the Utility Accident Investigation Report, and being otherwise sufficiently advised, the Commission finds that prima facie evidence exists that LG&E is in

probable violation of 807 KAR 5:006, Section 24, as contained in paragraphs 3 through 6 above.

The Commission, on its own motion, HEREBY ORDERS that:

1. LG&E shall submit to the Commission, within twenty days of the date of this Order, a written response to the allegations contained in the Utility Accident Investigation Report and this Order.

2. LG&E shall file with the Commission within 20 days from the date of this Order a copy of the results of the autopsy report performed upon Mr. Jackson.

3. LG&E shall appear before the Commission on October 17, 1997, at 9:00 a.m., Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky, for the purpose of presenting evidence concerning the alleged violations of 807 KAR 5:006, Section 24, and of showing cause why it should not be subject to the penalties prescribed in KRS 278.990(1) for its alleged failure to comply with Commission regulations.

4. The Utility Accident Investigation Report of February 3, 1997, a copy of which is appended hereto, is hereby made a part of the record of this proceeding.

5. Any motion requesting an informal conference with Commission Staff to consider any matter which would aid in the handling or disposition of this proceeding shall be filed with the Commission no later than 20 days from the date of this Order.

Done at Frankfort, Kentucky, this 17th day of September, 1997.

PUBLIC SERVICE COMMISSION

Linda K. Breathitt
Chairman

[Signature]
Vice Chairman

B. J. Helton
Commissioner

ATTEST:

[Signature]
Executive Director

APPENDIX

AN APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 97- 376 DATED 9/17/97

July 7, 1997

Page 1

UTILITY ACCIDENT INVESTIGATION REPORT

Utility:	Louisville Gas & Electric Company			
Reported By:	George Siemens			
Dates & Times				
Accident Occurred:	01/27/97 - 11:30 p.m.			
Utility Notified:	01/27/97 - 11:40 p.m.			
PSC Notified:	01/28/97 - 1:15 a.m.			
Investigated:	01/28/97			
Written Report Rcvd:	02/03/97			
Location of Accident:	Mill Creek Power Plant, 14660 Dixie Highway, Louisville, Kentucky			
Description of Accident:	<p>Mill Creek Unit 4 was out of service for maintenance. Mr. Don Sanders and Mr. Walter Jackson were cleaning the condenser tubes. Mr. Jackson was shooting darts in the tubes inside the condenser, and Mr. Sanders was observing from the outside. After approximately 25 minutes of shooting darts, Mr. Jackson fell from the platform where he was standing to the metal grid covering the butterfly inlet valve. (See Attachment A and B.). Mr. Walter Jackson was standing on a 2 x 10 piece of wood inside the condenser to perform his job. An opening of approximately three feet between the 2 x 10 piece of wood and the condenser wall was left unsecured. Mr. Jackson fell through that opening.</p>			
Victims:				
Name:	Mr. Walter J. Jackson	Fatal:	Yes	Age: 41
Addr./Empl.:	Louisville Gas & Electric Company			
Injuries:	Fatal			
Witnesses:	Name		Address/Employment	
	Mr. Don Sanders		Louisville Gas & Electric Company	

Sources of Information:	Name	Address/Employment
	Chris Hermann	Louisville Gas & Electric Company
	Gregory B. Fergason	Louisville Gas & Electric Company
	Larry Miller	Louisville Gas & Electric Company
	John N. Voyles, Jr.	Louisville Gas & Electric Company
	Rolf Parr	Louisville Gas & Electric Company
	Bob Easton	Louisville Gas & Electric Company
	Nancy Vimont Strickland	Louisville Gas & Electric Company
	Ray Wallace	Louisville Gas & Electric Company
Probable Violations:	<p>Mr. Jackson had no fall protection equipment, nor were safety procedures explained to him prior to the beginning of the job. LG&E did not enforce the requirement in its "LG&E Safety Resource Handbook", which states on Page 32, B.8.3, "Employees working from equipment pertaining to power generation, transmission, or distribution or similar unguarded working surfaces which are elevated four (4) feet or more above a lower level shall be secured by safety belts and lanyards, life lines or shall be protected by safety nets. LG&E had no safety procedure for cleaning the tube inside the condenser. LG&E is in a probable violation of 807 KAR 5:006, Section 24, which requires the utility to adopt and execute a safety program.</p>	
Investigated By:	John W. Land, Faud Sharifi, and Elie El-Rouaiheb, PSC Engineering Staff	
Signed:	<i>John W. Land</i>	
	<i>Faud Sharifi</i>	
	<i>Elie El-Rouaiheb</i>	

- Attachments
- A. Louisville Gas & Electric Company's Accident Report
 - B. Staff Engineering Report
 - C. Procedures for Cleaning the Mill Creek Unit 4 Condenser
 - D. Police Report
 - E. Copy of Death Certificate

Attachment A

Louisville Gas & Electric Company's Accident Report



February 2, 1997

Louisville Gas and Electric Company
220 West Main Street
P.O. Box 32010
Louisville, Kentucky 40232

Ms. Martha Morton
Kentucky Public Service Commission
730 Schenkel Lane
P. O. Box 615
Frankfort, KY 40602

**RE: Incident at LG&E Generating Plant
Mill Creek Unit 4**

Dear Ms. Morton:

Attached is an "Investigation Report" on the above incident. This is filed in compliance with the seven-day reporting requirement.

If you need additional information concerning this report, please let me know. I can be reached at (502) 627-4883.

Very truly yours,

A handwritten signature in cursive script that reads "Greg Ferguson".

Gregory B. Ferguson
Regulatory Affairs Coordinator

Attachment



Louisville Gas and Electric Company
220 West Main Street
P.O. Box 32010
Louisville, Kentucky 40232

INVESTIGATION REPORT

ACCIDENT

Type of Report

97-M-005

Report Number

A L Miller

Investigator

January 27, 1997

Date of Incident

Reference: LG&E Employee Fell

Location: Louisville Gas & Electric Company
Mill Creek Generating Station
14660 Dixie Highway
Louisville KY. 40272

Case Summary:

On Tuesday January 28, 1997, at approximately 01:07 hours, I was notified by George Siemens, Director of External Affairs, about an employee falling at the Mill Creek Generating Station. Mr. Siemens also notified Martha Morton with the Public Service Commission.

At 02:23 hours, I arrived at Mill Creek Generating Station and was informed Mr. Walter J. Jackson had fallen from a platform located inside the number 4A1 condenser and was critically injured. Mr. Jackson collapsed and fell at approximately 23:30 hours on Monday, January 27, 1997.

Mr. Don Sanders reported he was the backup person to Mr. Jackson. Mr. Sanders stated he was watching Mr. Jackson through the top hatch of the condenser while he was working. He stated at 23:00 hours on Monday, January 27, 1997, the air quality was tested with an MSA meter prior to starting work. The meter showed there was a 20.8% oxygen level inside the condenser and there were 0 % readings on the LEL, PPM CO, PPM H₂S, and PPM SO₂. Mr. Jackson was in the process of shooting darts (plastic devices that clean the condenser tubes) through the condenser tubes with high pressure water and air. Mr. Sanders stated after approximately twenty five (25) minutes of working inside the condenser Mr.

ALM

Investigation Report

Page 2

Jackson stated he was going to rest for a minute and when he turned around he collapsed and fell, sliding down between the condenser wall and the platform and then he fell to the grating below, a distance of approximately six (6) feet. Mr. Sanders stated he climbed down from the exterior grating to the basement floor and ran to a mike for the Public Address System and called for help. He stated when he climbed back up to the lower level at the bottom hatch to the condenser, he could see Mr. Jackson had fallen from the grating to the water below a distance of approximately six (6) feet and five (5) inches, and was floating face down. Mr. Sanders stated he climbed into the condenser and into the inlet line and down to where Mr. Jackson was floating and grabbed him from the back and pulled his upper torso out of the water. Mr. Jackson was removed from the condenser by Mr. Sanders and the Emergency Response Team members and the supervisors. Mr. Jackson was placed on the grating outside the condenser and at this time Jefferson County Police and EMS arrived and began CPR. At approximately 00:20 hours on Tuesday January 28, 1997, Mr. Jackson was loaded on the Stat Flight (helicopter) and taken to University Hospital where he was placed on life support. Mr. Jackson died at approximately 21:00 hours.

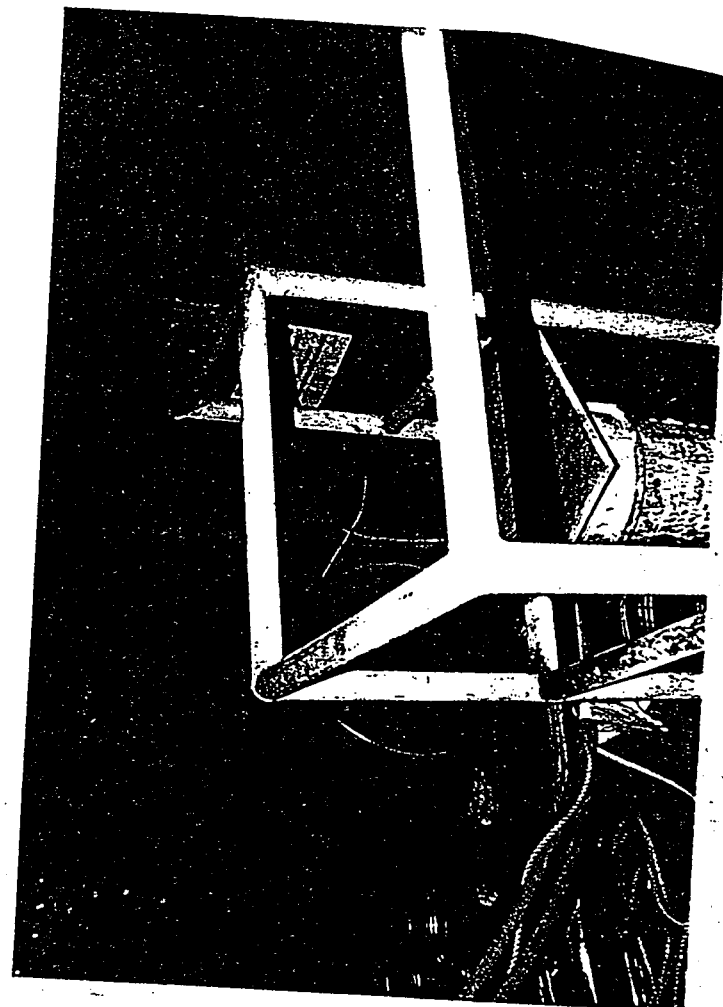
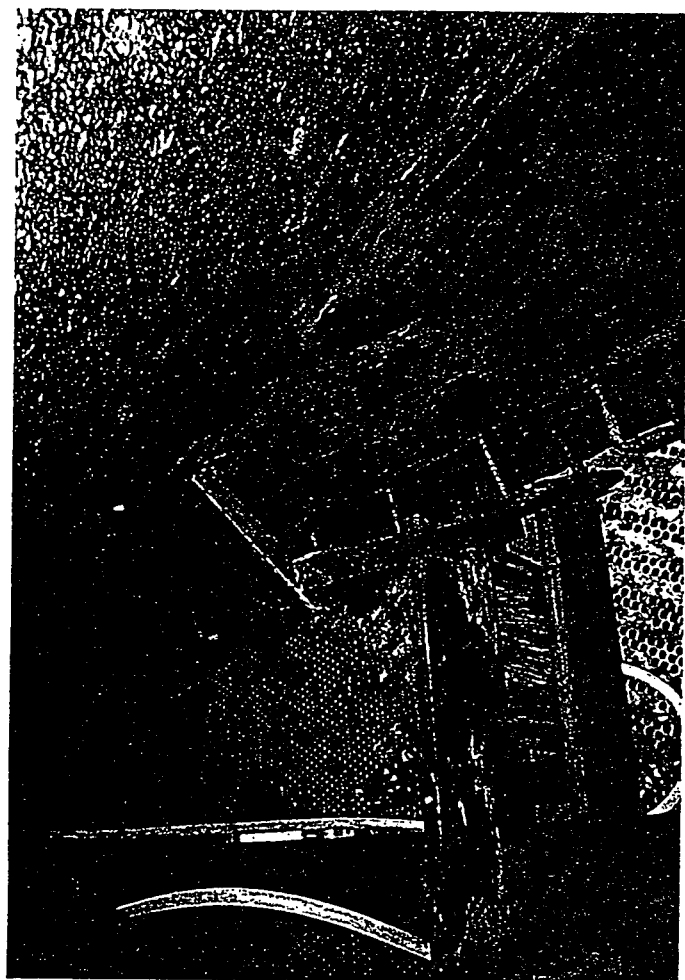
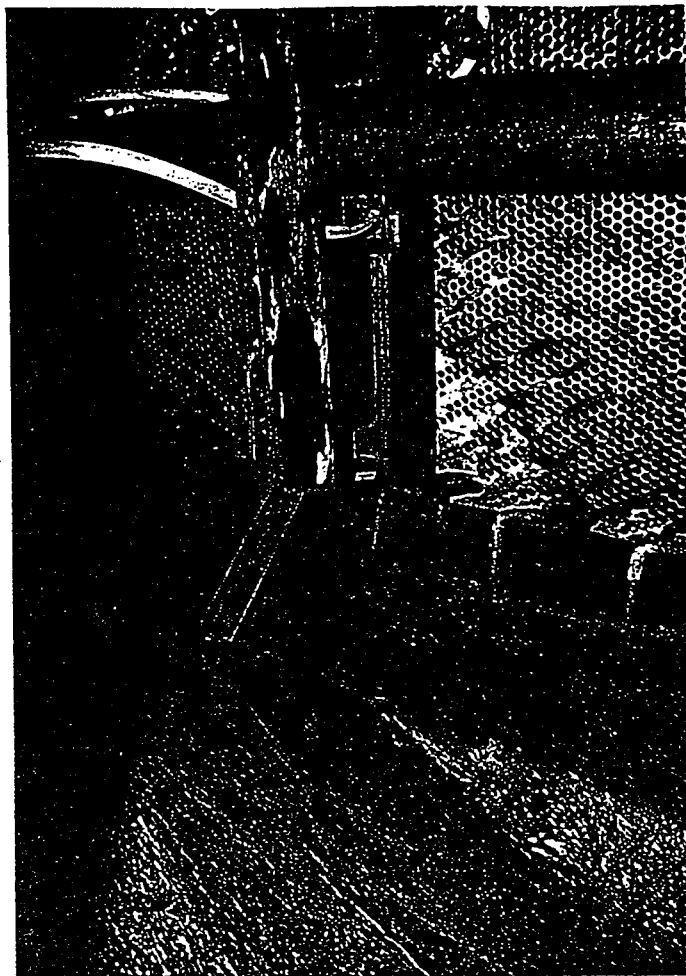
In a later interview on Thursday, January 30, 1997, Mr. Sanders told Company officials that Mr. Jackson fell onto the platform at the top of the condenser. He went to summon help at this point, and when he returned, Mr. Jackson was in the water at the bottom of the condenser.

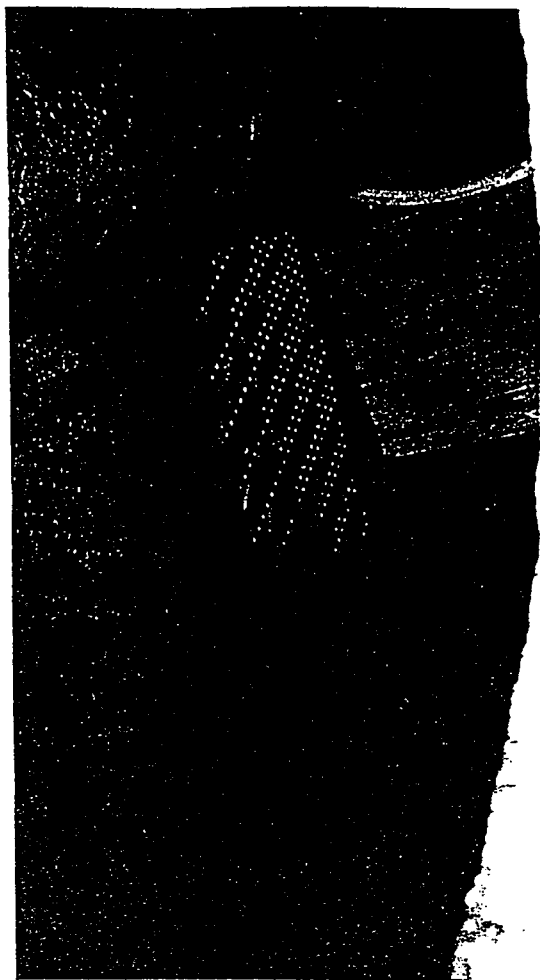
Mr. Jackson was forty-one (41) years of age.

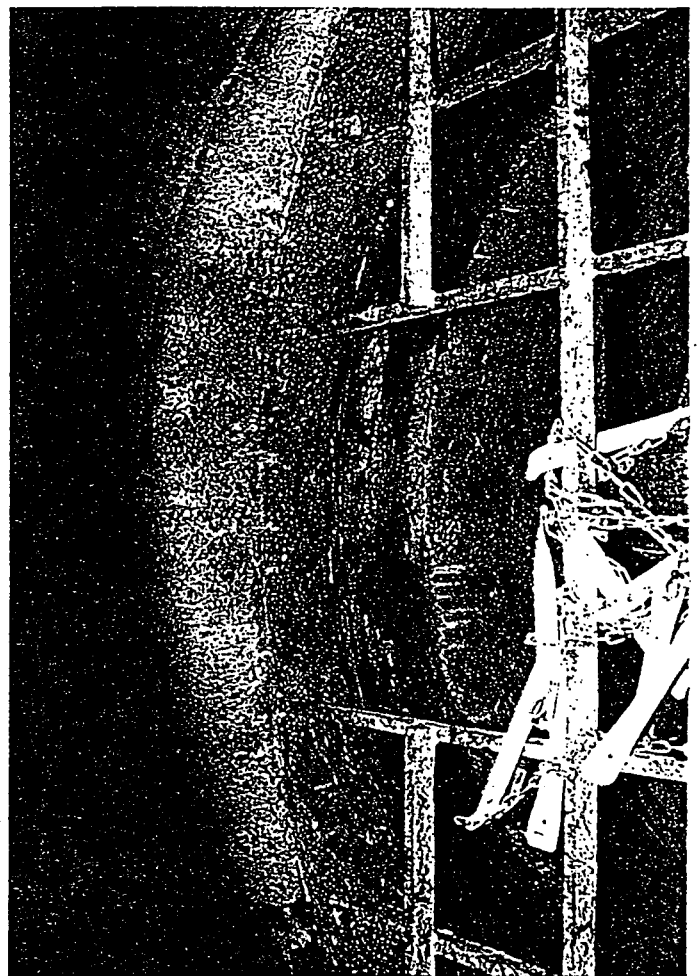
Photographs were taken of the accident site.

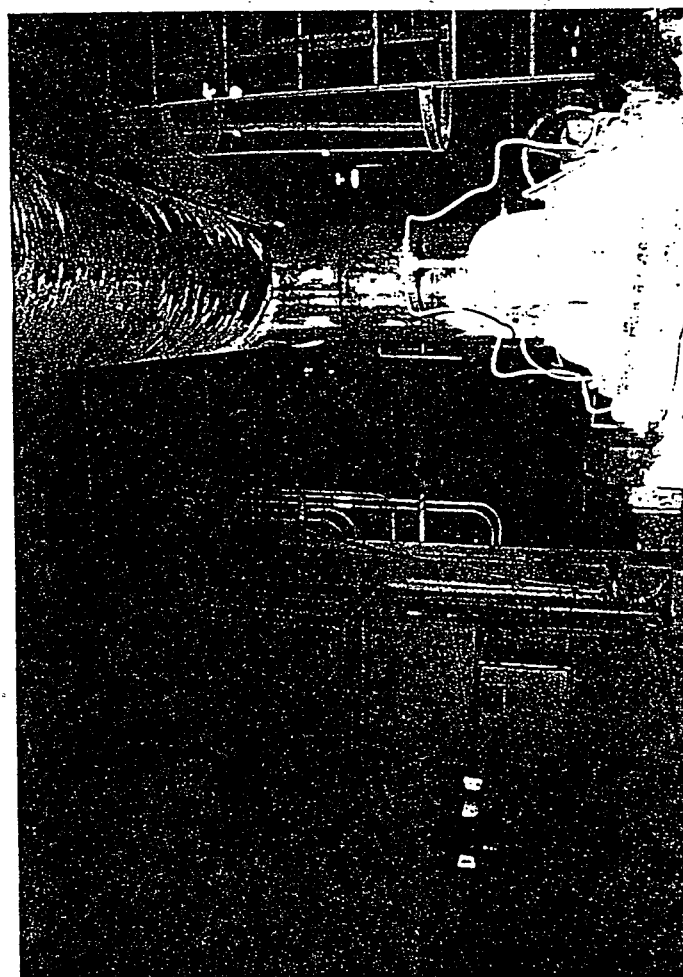
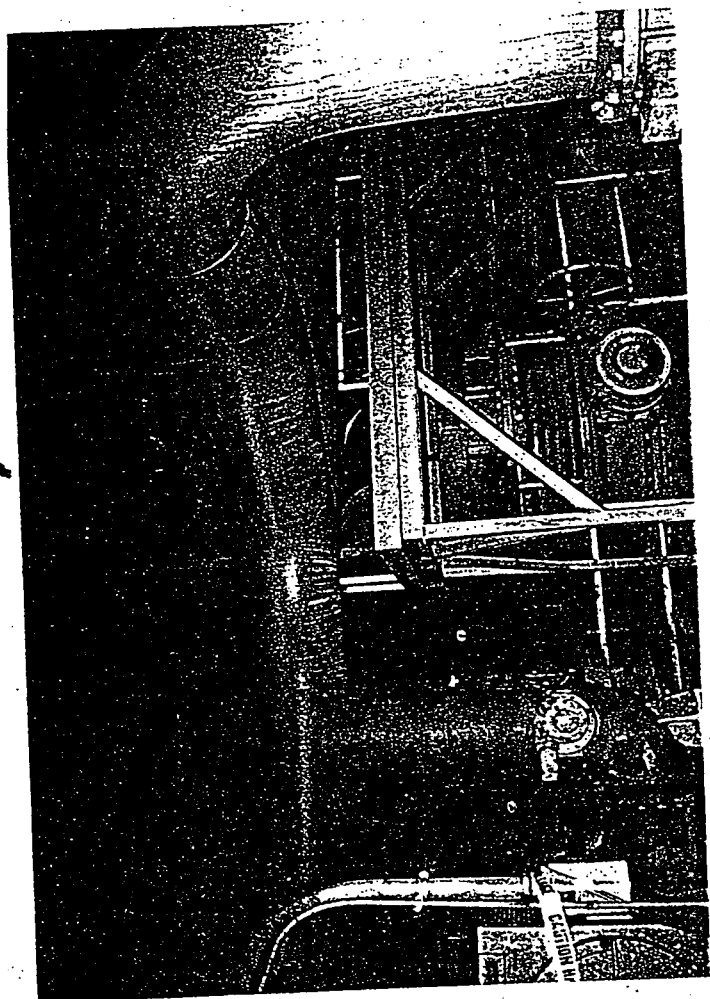
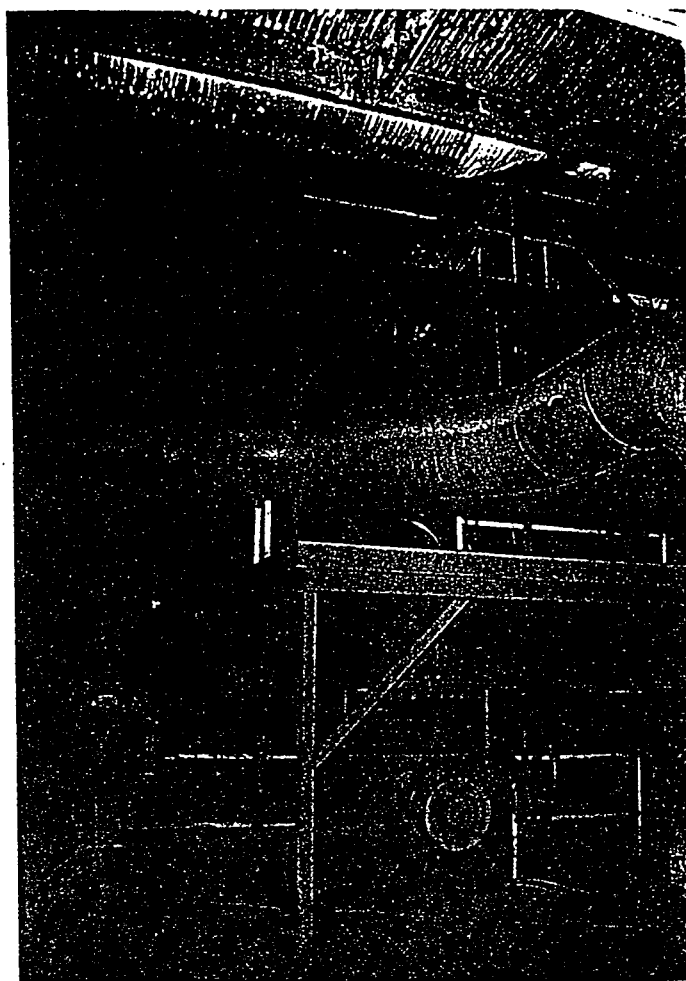
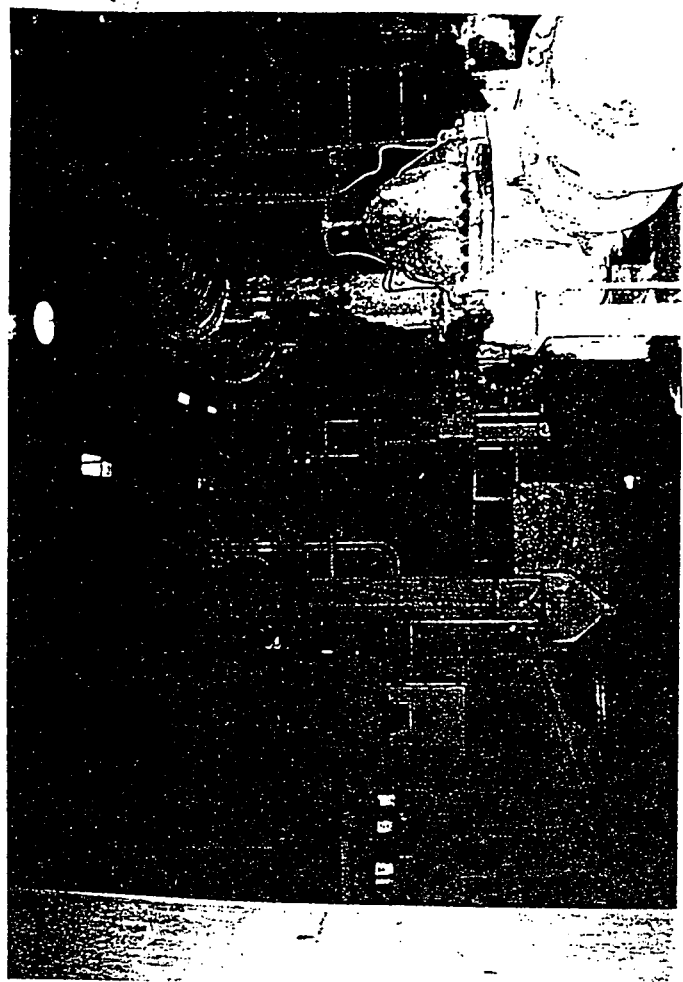
On Tuesday, January 28, 1997, at approximately 09:45 hours, Mr. John Land with the Public Service Commission arrived to investigate the incident.

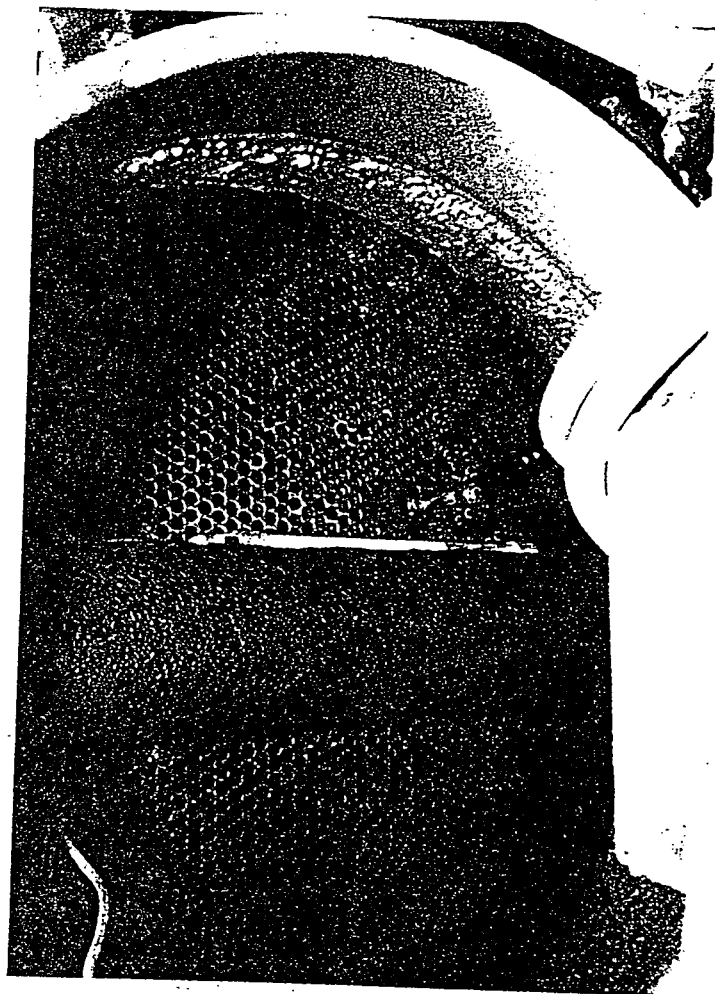
adm

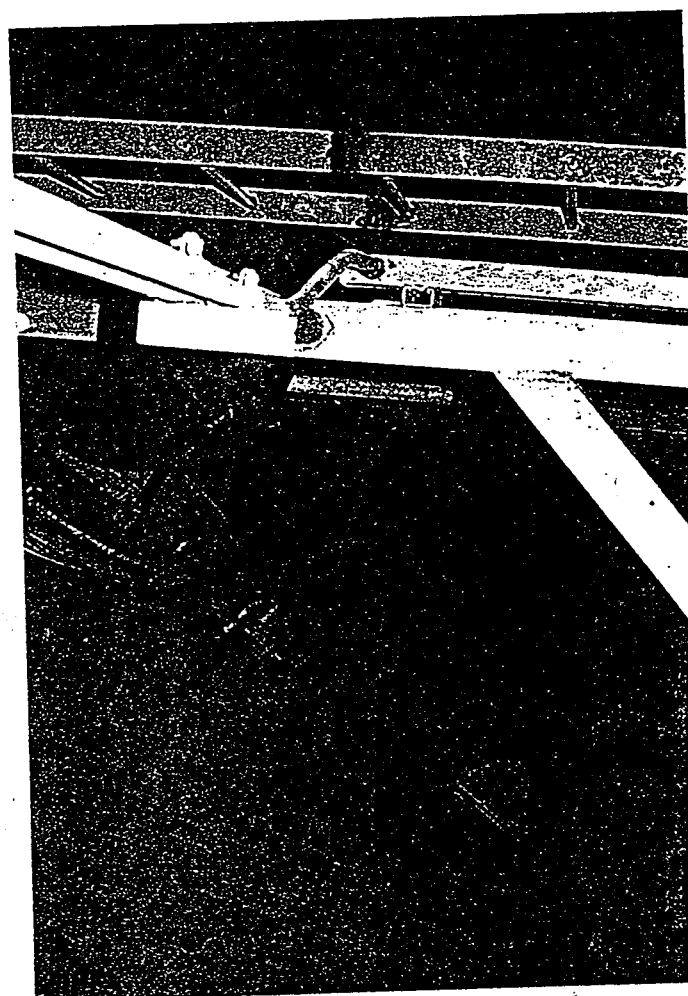
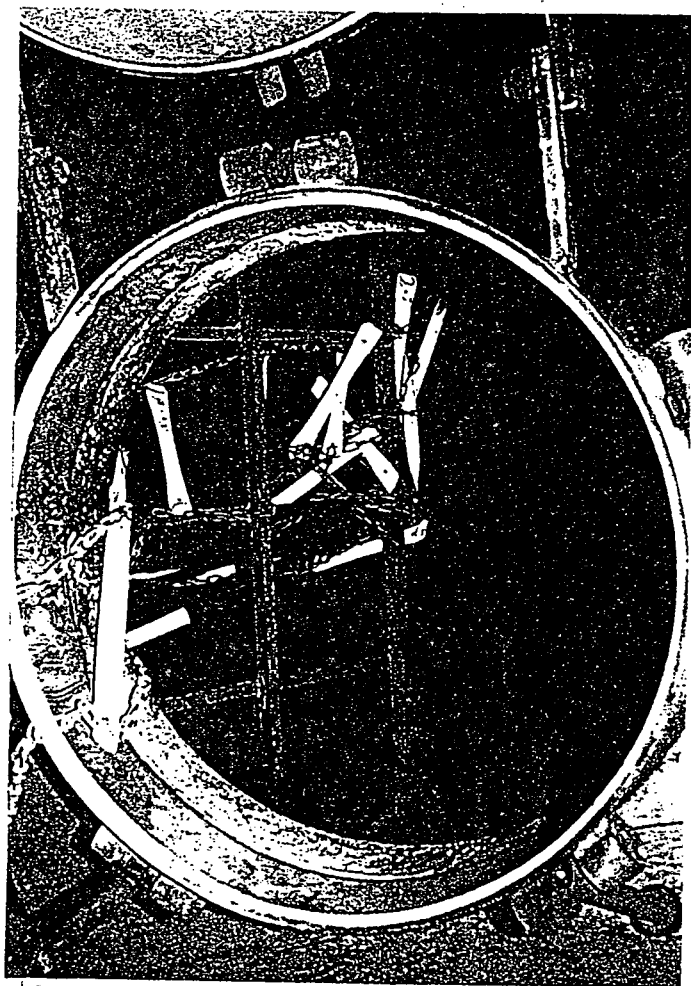
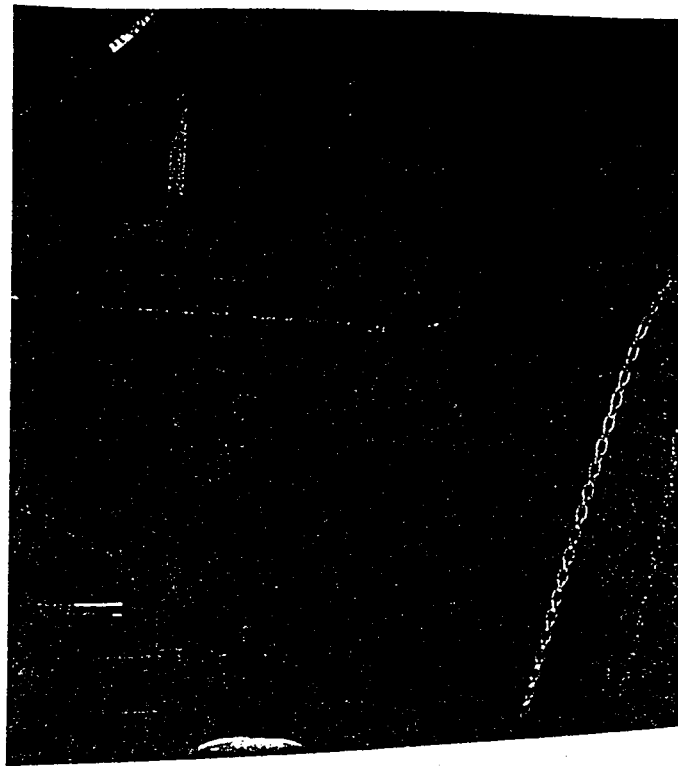
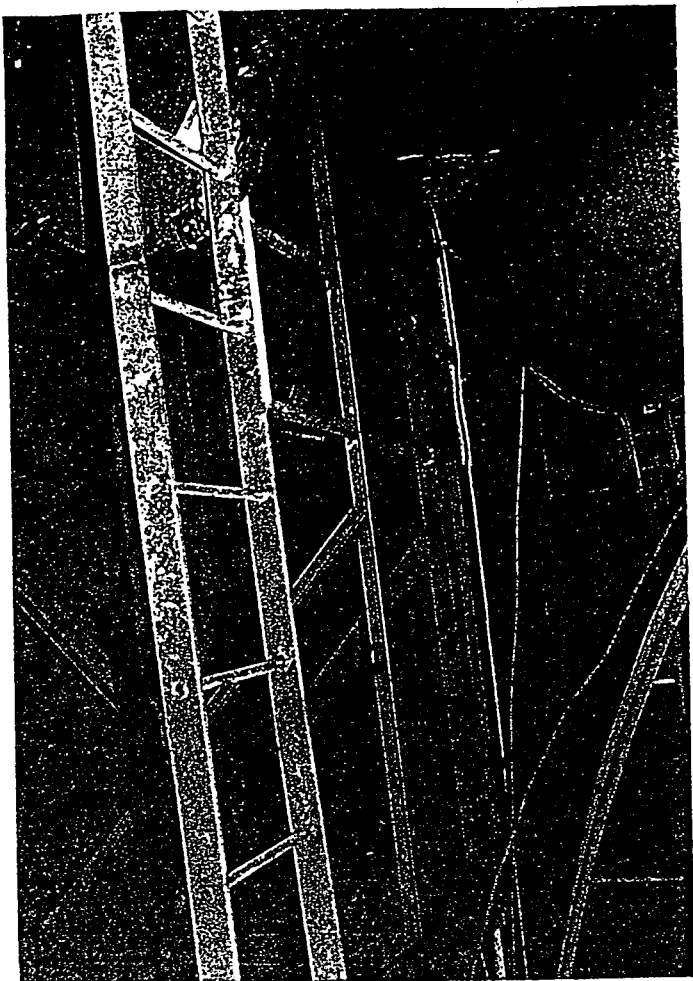


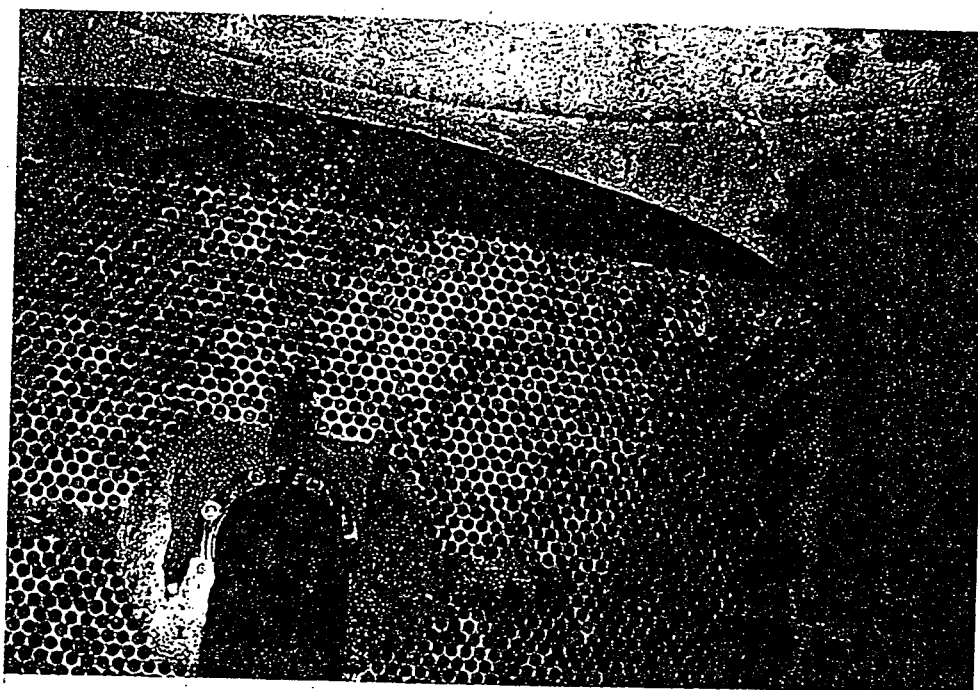
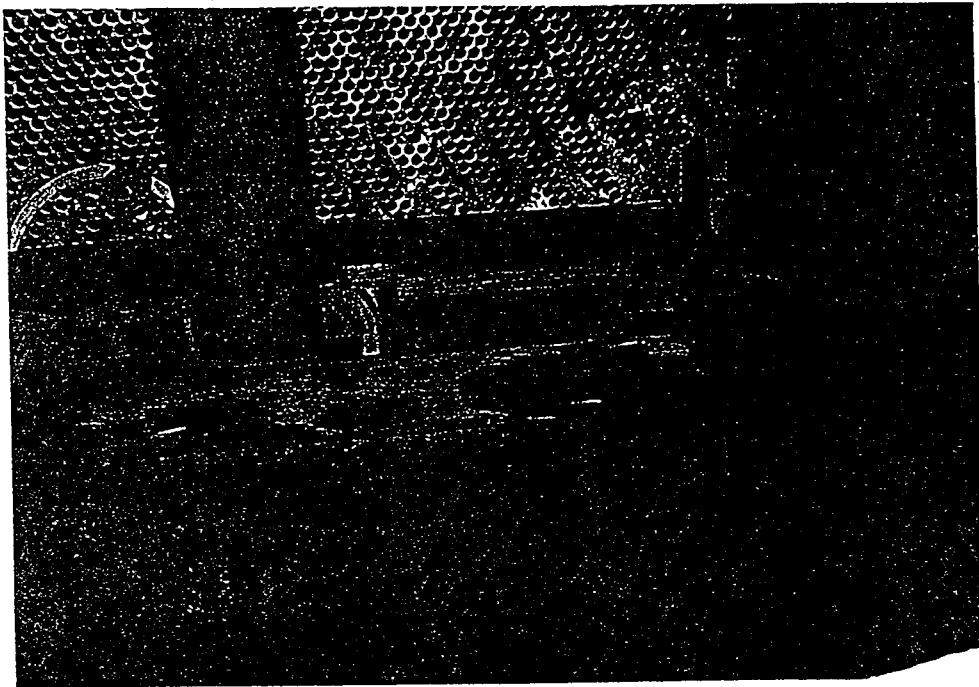












EMPLOYEE INFORMATION **BULLETIN**

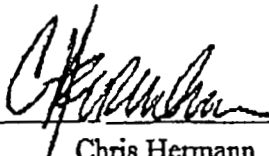
January 28, 1997

Employee Critically Injured At Mill Creek

I am very sad to report that Walter Jackson, 42, Wholesale Electric, was critically injured after falling from equipment at our Mill Creek generating station last night.

Walter and another employee were working on the Mill Creek 4 condenser at the plant when he collapsed and fell. Walter is in critical condition at University Hospital. The Public Service Commission and KOSHA were notified during the night, and we are in the process of conducting a full-scale investigation.

We, in the Wholesale Electric Business, are deeply troubled and saddened by this incident and will take every measure to ensure his family members are cared for in their time of need.



Chris Hermann

Vice President and General Manager
Wholesale Electric Business

View LGEPHONE Directory Record

More: +

C=CC-list E=Dept title K=Calendar M=Send Note
 N=Nickname R=Reports to S=Secretary T=To-list

-list V=View record
 More: >

Action Code -

on Node
 FICE COMPLEX LGEVM
 STATION LGEVM
 VICE CENTER LGEVM
 CE CENTER LGEVM
 SERVICE CENT LGEVM
 FICE COMPLEX LGEVM

Employee Name : Sanders Jr, Donald L.
 Work Phone : 933-6700
 User Id : LGE2809
 Work Location : MILL CREEK STATION
 Position/Title : OPERATOR - PLANT
 Department Number . . . : 029
 Department Title : PRODUCTION-MC
 Costcenter : 232
 Costcenter Title : MC - COMMON PLANT
 Immediate Supervisor . : REIN R

to F6=Show dept
 st F12=Cancel

F1=Help F2=Set 2 F3=Exit
 F4=Secretary F5=Reports to F6=Show dept
 F7=Backward F8=Forward F12=Cancel

SANDERS DONALD LOUIS

MC

5529 BRUCE AVE. 029-2809
 LOUISVILLE, KY 40214 OPER./PLANT

368-9283

CLASS-DATE: 07-21-80 BIRTH DATE: 11-17-53

EMP DATE: 08-24-76 SS NUMBER: 404-78-4640

IN CASE OF ACCIDENT - NOTIFY:

DEANNA SANDERS WIFE
 5529 BRUCE AVE.
 LOUISVILLE, KY 40214

HOME: 368-9283
 WORK: ~~629-3440~~
 473-3400

Tom SANDERS

Brother
 969-1727

Updated: 01-06-94

MARRIED

DEANNA MARIE SANDERS
 JAMES LEE MILLS

WIFE
 SON

10-20-56
 11-10-86

Witness

Sanders, Donald Lewis

29-2809

Injuries:

No Past History

Work History:

Employment Date - 8/24/76 at Cane Run as a Station Helper

Classification Date - 8/24/76	Station Helper
5/16/77	Transferred to Mill Creek
Classification Date - 7/25/77	Auxiliary Operator
Classification Date - 7/21/80	Operator - Plant

View LGEPHONE Directory Record

More: +

C=CC-list E=Dept title K=Calendar M=Send Note
 N=Nickname R=Reports to S=Secretary T=To-list

-list V=View record

More: >

Action Code

Node Jo

Employee Name : Jackson, Walt J.

-9 LGEVM AC

Work Phone : 933-6700

ER CTR LGEVM GA

User Id : LGE3332

-12 LGEVM CL

Work Location : MILL CREEK STATION

CENTER LGEVM TR

Position/Title : OPERATOR - PLANT

ATION LGEVM OP

Department Number . . : 029

Department Title . . . : PRODUCTION-MC

Costcenter : 232

Costcenter Title . . . : MC - COMMON PLANT

Immediate Supervisor . : LOVE K

F1=Help

F2=Set 2

F3=Exit

F4=Secretary

F5=Reports to

F6=Show dept

F7=Backward

F8=Forward

F12=Cancel

to F6=Show dept

st F12=Cancel

JACKSON

WALTER

JAY

MC

5605 MORNING STAR WAY

029-3332

LOUISVILLE

KY 40272

OPER - PLANT

~~933-8482~~ 935-7366 ~~953~~ 935-9410

CLASS-DATE: Jun-21-82

BIRTH DATE: Nov-22-55

EMP DATE: Sep-25-79

SS NUMBER: 407-84-4546

IN CASE OF ACCIDENT - NOTIFY:

MARGIE SIMMONS

MOTHER-IN-LAW

HOME: 935-5499

6310 CHADRON DRIVE

WORK: -

LOUISVILLE

KY 40258

Updated

16-Nov-80

Diane Jackson

Shlania Michelle Jackson

07-23-55 Wife

02-25-75 Daughter

Jackson, W. J. 29-3332

Injuries:

9-14-78 Lost Time Injury-bruised and lacerated left knee

1-13-81 Lost Time Injury- Contusion scalp, strain neck and parascapular
 muscles

2-14-83 Not Lost Time-Foreign body in left eye

12-22-83 Lost Time Injury-Contusion left lower chest, strain.

Work History:

Employment Date - 9/25/79 at Mill Creek as a Station Helper

Classification Date - 9/25/79 Station Helper

Classification Date - 9/01/80 Auxiliary Operator

Classification Date - 6/21/82 Operator - Plant

Attachment B
Staff's Engineering Report

Utility Accident Engineering Report

Introduction

On Wednesday, February 12, 1997, Elie El-Rouaiheb and Faud Sharifi ("Staff"), investigated an incident that had occurred at Louisville Gas & Electric Company's ("LG&E") Mill Creek power plant in Louisville.

Staff conferred with John N. Voyles, Jr., Plant General Manager; Gregory B. Ferguson, Regulatory Affairs Coordinator; Rolf Parr, Director of Safety; Ray Wallace, Health and Safety Specialist; Bob Easton, Manager, Health and Safety; and Nancy Vimont Strickland, Industrial Hygienist.

John Voyles gave a presentation about the structure of Condenser No. 4 where the fatal accident occurred on January 27, 1997.

Mr. Voyles said that this type of work has been carried out since 1982 without incident. No written safety procedure existed at the time of the accident. LG&E has established a safety procedure after the accident.

Findings

Unit No. 4 is a 500 MW, coal fired steam turbine. On January 27, 1997, this unit was out of service and under an overall maintenance. The low pressure steam leaves the steam turbine and is condensed in the water condenser. The water condenser is composed of four sections. Each section has two hatchways (Man ways) from each side. The upper hatchway is located on an elevated catwalk accessible by a stairway. Water is fed into this section of the condenser from the bottom of the condenser via a butterfly valve, which was open at the time of the accident. The gate of the valve was submerged in water. The distance between the tubes' sheet and the condenser wall at the platform level was about five feet and the gap increased at the lower part of the condenser. The cleaning process of the tubes is to shoot plastic darts through them with high pressure water and air. The crew stands on two pieces of plywood, placed on two (2 x 10 inches by about 6 feet) pieces of wood. The two pieces of wood are located about one foot apart because of the vacuum vertical pipe that runs between them. The crew normally consists of two people who work inside, and one backup stays outside the condenser. At the time of the accident Mr. Jackson was shooting darts by himself. Mr. Sanders was a backup who stayed outside the condenser. Air quality inside the condenser was tested prior to commencement of work. The oxygen measured 20.8%.

Approximately 25 minutes from the beginning of shooting darts, Mr. Jackson collapsed and slid down from the platform. It appears that Mr. Jackson fell on the grid covering the butterfly valve. Since the butterfly valve was open, the butterfly gate was in a vertical position. The thickness of the gate is about three inches and this will leave about a three feet opening from each side of the gate. The grid was about six feet below the plywood where Mr. Jackson was standing. There were iron grids, bars, and cables inside the condenser. Although most of the dirt and scale removed during cleaning are driven by the darts into the other side of the tubes, the wooden platform could have been slick with wet dirt and scale deposits. The space of the cleaning zone was confined and natural ventilation in that enclosed environment must have been limited.


The crew did not have a written safety procedure to perform their work. The crew did not carry a gas analyzer or warning instruments in case of lack of oxygen or presence of other undesirable gases in the condenser. The crew did not have portable communication equipment to contact emergency personnel in case of emergency. Mr. Jackson was not equipped with a harness.

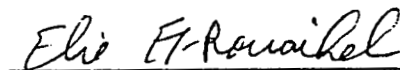
By visual inspection of the interior of the condenser, it did not appear that the condenser was designed to accommodate manual cleaning inside the condenser. There was no easy access from hatchways to the interior parts of the condenser, and no proper supports for platforms.

Recommendations

1. LG&E should contact the designers of the condenser and consult with them on the best method of cleaning the tubes and any modifications or additional equipment required to operate the cleaning process in a safe manner.
2. LG&E should provide continuous education to its crews regarding safety procedures which LG&E established after this accident.
3. The space available for cleaning the condenser's tube is a confined space. External forced air should be supplied into the condenser when people are working inside it. An adequate sized air blower to meet the quantity and quality of air should be considered.
4. Adequate lighting above and below the platforms should be provided.
5. The platform should cover the full working area and made of non-slick material such as a grading platform.
6. There should be internal ladders with easy access from the upper and lower hatchways to the platform or any part of the working zone inside the condenser.

7. The crew should be equipped with an oxygen analyzer and communication devices as necessary.
8. LG&E should provide the crew with fall protection, goggles, hard hats, special gloves, and special non-slick shoes.
9. Safety personnel should provide special permits issued for maintenance crews to follow on any job that requires a safety procedure. The permit should provide clear instructions for the crew to implement their work in a safe manner. Preferably the safety personnel and the crew should sign the permit prior to starting any work that the safety personnel consider as a safety hazard.
10. The water inlet valve should be closed, preferably locked in a closed position during the maintenance period.


Faud Sharifi, Acting Branch Manager
Gas Branch


Elie El-Rouaiheb, Engineer
Electric Branch

Attachment C

Procedures for Cleaning the Mill Creek Unit 4 Condenser

Procedures for Cleaning the Mill Creek Unit 4 Condenser

(Rev 4/27/97)

- 1) Remove the Cooling Tower Pumps from service and place **HOLD CARDS** on same.
(The Horizontal Service Water Pumps should also be carded and isolated at this time)
- 2) Close the Condenser inlet and outlet waterbox isolation valves (4) and place **DANGER CARDS** on same.
- 3) Drain the Condenser waterboxes.
- 4) Open the Condenser waterbox doors on front and back. (16)
- 5) Contact Maintenance Services or a qualified contractor to install a *Work Deck* over the gratings that are covering the openings for the condenser inlet and outlet lines.
- 6) Contact Maintenance Services for the **removal** of any **ASBESTOS** fill from inside the condenser waterboxes.
- 7) Contact Maintenance Services or a qualified contractor to install *Scaffolding* in the east side waterboxes for Operations to work off of.
- 8) Calibrate a Passport Air Monitor.
- 9) Perform *Job Briefing* before starting the job and at the change of each shift.
- 10) Review the **CONFINED SPACE** requirements and view the videocassette that is located in the Production Leader's Office.
- 11) Wear appropriate **PPE** (Personal Protective Equipment - Such as Hard Hat, Eye & Ear Protection and Work Gloves) and optional **PPE** to deal with *Legionella* concerns (Coveralls or Rainsuit, Rubber Gloves and Respirator)
- 12) Obtain extension cords, lighting and **Ground Fault Protection** from the Operations storage area. There is an electrical outlet located on the west side of the condenser on the I-Beam located in between the "A" and "B" Condenser.
The new lights are heavy duty, waterproof and have a large magnet on the back for wall mounting.
- 13) Before entering the condenser waterbox, review the **Fall Protection** guidelines to determine need, based on type of *Scaffold* or *Work Platform*.
NOTE: Body Harnesses will be worn by all employees entering the condenser regardless whether or not they will be tied off to a life line.
NOTE: RADIO COMMUNICATION will be used anytime an attendant is used.
- 14) Obtain the Conco hoses, Conco Water Guns and cleaning darts (approximately 1300 darts) from the Operations tool storage room. Install the one inch hose to the connection off of the Sealing Water Header on the east side of the condenser. Be sure to install a pressure gauge (0-400 psi) right after the isolation valve. The one inch hose should be ran off of the header to a "T" at which time two (2) three quarter inch hoses can be ran to the back of the condenser. The Conco Water Guns should be connected to the other end of these hoses. The Conco Water Guns should be in good working condition with splash guards attached and new brass tips installed.
- 15) Load (insert) the cleaning darts into the condenser tubes.
- 16) Install the tarp for the retrieval system on the opposite side of the condenser.
(Follow the same guidelines for **Fall Protection** as above)
- 17) Shoot the cleaning darts through the condenser tubes, one at a time using the Conco Water Gun that is being supplied water from the Make-up Pumps. Approx - 300 psi
- 18) Once the darts have been shot, Operations can retrieve them from the other side.
NOTE: Baseline air monitoring tests performed by Health and Safety have determined that the **ASBESTOS** levels are safe for Operations to retrieve the cleaning

darts. This is as long as the **ASBESTOS** fill is wet and Operators are not removing any of it. Any removal of the **ASBESTOS** material should be done by qualified Maintenance personnel.

- 19) Before the *Scaffolding* or *Work Platform* is removed, check that all of the tubes that have been cleaned (by placing a light in the waterbox on the opposite end and looking thru the tubes) to see if any darts are stuck. If so, use the fiberglass rods that connect together to push these darts out.
- 20) Contact Maintenance Services or a qualified contractor to remove any *Scaffolds* or *Work Platforms*.
- 21) While this job is ongoing, it is very important to keep *Housekeeping* in order. Please keep all tools and material in their proper place and all walkways, work platforms and access doorways clear of trash and debris.
- 22) Continue this procedure until all four (4) condenser waterboxes have been cleaned.
- 23) When complete, remove all equipment from the condenser, clean it and store it in the Operations storage area.
- 24) Again, contact Maintenance Services or a qualified contractor to remove any *Scaffolds* or *Work Platforms* from inside the condenser.

Attachment D
Police Report

REPORT NUMBER <u>7-003176</u>		DATE OF REPORT <u>01-27-97</u>		TIME <u>2342</u>		Supv Review <u>ddg</u>	
TIME OF OFFENSE: From Date <u>01-27-97</u> Time <u>2335</u> To Date <u>01-27-97</u> Time <u>2342</u>						Data Entry <u>/</u>	
HOW REPORTED: (X) 1-Dispatch () 2-Phone () 3-Investigation () 4-View () 5-Other						CID <u>/</u>	
CONFIDENTIAL (Y/N) <u>N</u> YES - LIMITED RELEASE WITH OUT INVESTIGATOR'S AUTHORITY						NCIC Entry <u>/</u>	
						NCIC Cancel <u>/</u>	
						Oper Code <u>/</u>	

TITLE OF INVESTIGATION	CODE	CITATION NUMBER
1 <u>INCIDENT</u>	<u>03013</u>	<u>0</u>
2		
3		
4		

LOCATION: Address 6605 DIXIE HWY. CITY LOUISVILLE ZIP 40272

AREA 023 DISTRICT D12 WAS SPOUSE ABUSE INVOLVED? (Y/N) N CHILD ABUSE? (Y/N) N ARREST MADE? (Y/N) M

ARSON CODE N/A AMOUNT OF LOSS FROM ARSON \$ — [Initial Report is Fire Report/Arson Squad will update]

STATUS OF CASE: () 10-Cleared By Arrest () 11-Cleared By Summons // CLEARED BY EXCEPTION: () 120-Death of Perpetrator
 () 121-Prosecution Declined () 122-Extradition Declined () 123-Victim will not Cooperate [Perpetrator must be known]
 () 124-Juvenile in Custody () 125-Adult in Custody // () 170-Case Unfounded () 130-Investigation Closed not Cleared
 (X) 140-Open/Active () 141-Open/Inactive DATE ACTION TAKEN _____ INVESTIGATING OFFICER _____ (CODE NUM)

WAS CRIME ANALYSIS USED IN INVESTIGATION OF CASE? (Y/N) N LINK INQUIRY MADE? (Y/N) N NCIC HIT? (Y/N) N

TYPE AREA: (X) 11-Inside/Rural () 12-Outside/Rural () 13-Inside/Urban () 14-Outside Urban
 OCCURRED AT/IN: () 11-Victim's Car (X) 12-Victim's Business () 13-Victim's Home () 14-Victim's Property
 () 15-Offender's Car () 16-Offender's Business () 17-Offender's Home () 18-Offender's Property
 () 19-Other // LIGHTING (X) 11-Good () 12-Poor () 13-N/A () 14-Other

CTIM DATA Are the Victim and Complainant the Same? () Yes (X) No

NAME (L,F,M) JACKSON, WALTER J. Sex M RACE W DOB 11-22-55 HGT _____ WGT _____

Address 6605 MORNING STAR WAY City LOUISVILLE STATE KY ZIP 40272

Home Phone 935-9410 Occupation OPERATOR EMPLOYER LG&E
 EMPLOYER ADDRESS 14660 DIXIE HWY. WORKING HOURS VARIOUS EMP PHONE 933-6500

Resident (X) 1-Full Time () 2-Part Time () 3-Other
 Marital Status () 5-Single (X) 11-Married () 10-Divorced

Person reporting if Not Victim (Must be completed if Victim is a Business) Name SANDERS, DONALD
LOUISVILLE, KY

Sex M Race W DOB 11-17-53 Address 5529 BRUCE AVE City/State/ZIP 40214 Phone 318-9283

RELATIONSHIP TO VICTIM: () 1-Business () 2-Bank () 3-Government (X) 4-Individual () 5-Religious Group () 6-Society () 7-Other () 8-Unk
 EXTENT OF INJURY TO VICTIM: () 1-None () 2-Broken Bones () 3-Severe Cuts () 4-Other Major injury (X) 5-Death (POSSIBLE)
 () 6-Minor Injury () 7-Loss of Teeth () 8-Possible Internal Injuries () 9-Unconscious

SUSTAINED: (X) 1-Accidental/Medical Attention () 2-Accidental/No Medical Attention () 3-Self Inflicted/Medical Attn
 () 4-Self Inflicted/No Medical Attention () 5-Aggressive Act/Medical Attention
 () 6-Aggressive Act/No Medical Attn () 7-Unknown/Medical Attn () 8-Unknown No Medical Attn

Reporting Officers J.L. Hayes / J.S. Hardy Code 6262 Code 6272 PAGE 1 OF 2 PAGES

SUPPLEMENTARY REPORT

JEFFERSON COUNTY POLICE DEPARTMENT

Offense DEATH INVESTIGATION	Date of Report 02/18/97	Time of Report 2400 HRS.	Report Number #7-003176-R
Date of Offense JANUARY 28, 1997	Time of Offense 0030 HRS.	Day of Week TUESDAY	Offense Location L. G. & E. 14660 DIXIE HIGHWAY
Victim JACKSON, WALTER J.	Race/Sex/Age W/M/41/DOB 11/22/55 SS #407-84-4546	Address 6605 MORNING STAR WAY	Phone No. #935-9410

RE: NOTIFICATION / SCENE / INTERVIEW WITH DONALD
SANDERS / INVESTIGATION OF SCENE / STATUS
OF VICTIM /

ADDITIONAL INFORMATION ON VICTIM:

Employed: Louisville Gas & Electric
Date: 09/25/79

INTERVIEWED:

Donald Sanders
W/M/43/DOB 111753
5529 Bruce Avenue
#368-9283

NOTIFICATION

On January 28, 1997 at 0045 hours, the undersigned, Det. Tim Skaggs (#596), was requested to respond to the Louisville Gas & Electric plant at 14660 Dixie Highway on an industrial accident. Officers were on the scene at that location and advised that the victim had been removed by STAT Flight to University Hospital. Det. Monty Higdon (#595) responded to the hospital, his investigative letter will be included in this case file. I responded to the scene from the Violent Crimes Unit's office.

SCENE

I arrived at the plant at 0115 hours. I was met at the front gate by a security officer. This officer escorted me onto the grounds where I was taken to a conference room inside the plant.

Off. S. Hardy (3D22) and Off. M. Hayes (3D22-A) were present in the conference room with a member of the L.G. & E. management staff. Off. Hayes advised me that they had responded to the plant on an injured subject. The victim had been working on a condenser unit in the plant. He had fallen approximately twenty feet (20') into a pool of water from a catwalk. A co-worker had pulled the worker from the pool of water and C.P.R. had been started at the scene.

Off. Hayes was completing the original offense report. I was provided with the personal information on the victim which was located on the cover page of this report.

The co-worker who was present at the time of the accident was brought to the conference room for this detective to interview.

INTERVIEW WITH DONALD SANDERS

Donald Sanders was the co-worker present with the victim at the time of the incident. Donald Sanders stated that he has worked for L.G. & E. for twenty and one-half years. He stated that he is classified as an "Operator."

Donald Sanders stated that the victim, Walter Jackson, and he had been working in the A-1 Condenser Inlet "shooting lines" on the upper section. He explained that this is a process where pressurized water is forced through the condenser's water lines to flush out slough and debris. This is a normal maintenance procedure when the condenser is out of service.

Donald stated that this procedure requires one man to enter the condenser unit and work from a catwalk. The second man remains outside the condenser on safety watch. He stated that before a worker enters the condenser the air quality inside the unit is tested. He stated that he conducted this test at 2300 hours, before the work began. The air quality was in the normal range.

This detective was provided with a copy of this test report. This report will be included in the case file.

Donald stated that Walter Jackson entered the condenser and began the work. He stated that Walter had "shot" approximately one hundred (100) lines, completing one side of the upper unit. He stated that Walter stopped to take a break. He stated that they had normal conversation, then he offered to trade places with Walter and finish the other side. He stated that Walter declined his offer and stated that he would finish the job. Donald stated that Walter looked like he was examining the job when he suddenly fell back against the wall of the condenser. Donald stated that Walter then fell to his knees, then rolled off the catwalk and fell to the next level. He stated that this was a distance of approximately ten feet (10').

Donald stated that he climbed down from the upper level of the condenser and ran to call for assistance. He stated that when he returned, Walter was no longer on the second level. He stated that Walter had fallen into a pool of water in the bottom of the condenser unit. He stated that this pool is approximately seven feet (7') below the second level. The pool is approximately six feet (6') at the deepest point, as the condenser funnels down at the bottom. Donald stated that he then climbed down to ground level. He stated that he was able to reach the victim and pull him partially up out of the water by his raincoat. He stated he held the victim until help arrived. At that point a ladder was lowered into the pool of water. Two (2) workers climbed into the

pool and were able to lift the victim out. The victim was not breathing when he was removed from the pool of water. C.P.R. was started at the scene until E.M.S. personnel arrived.

Donald Sanders stated that Walter was in good spirits today at work. He had not been complaining of any illness or medical problems. He stated that the victim did not call out in pain or grab his chest before he fell backwards. He stated that Walter had been talking normal and acting fine until he suddenly fell back against the condenser wall. He stated that he heard Walter cough a few times after he fell to the second landing.

I completed my interview with Donald Sanders.

INVESTIGATION OF SCENE

After my interview with Donald Sanders, I was escorted to the condenser unit in the basement of building number four. This particular condenser is identified as Unit 4.

I found the condenser to be a large cylinder that appeared to be approximately four to six feet across. The condenser is accessible by three (3) manhole size openings; one is located at the level of the floor, the second is located off a catwalk approximately ten feet (10') high; and, the third is located off a catwalk approximately twenty feet (20') high. The catwalks to the second and third levels are accessible by ladders. The openings at each level were found to be open.

At the floor level I located a chain ladder that had been lowered through a metal grate to a pool of water. I did not note anything outside the opening on the second level. At the third level, where Donald Sanders stated they had been working, I found a wooden plank leading into the condenser unit. Two (2) water lines feed into the condenser unit. An electric cord that charged a light was also present. Various items were noted on the catwalk outside, including several buckets and two (2) face shields. A white nylon rope was tied to the rail of the catwalk. This rope was laying coiled on the catwalk, it did not appear that it had been used inside of the condenser unit. I looked inside of the

third level opening and observed a metal catwalk inside the condenser unit approximately three feet (3') below the opening. This catwalk appeared to have an opening of ten to twelve inches on the sides. I noted that placards warning of Danger potential confined space, were located outside of each opening to the condenser unit.

I photographed the above noted scene at 0220 hours.

I cleared the plant at 0230 hours.

STATUS OF VICTIM

I contacted Det. Higdon by phone at the Violent Crimes office. Det. Higdon advised that the victim was still being maintained by life support but was not expected to survive.

An autopsy examination request was faxed to the Evidence Technician Unit by Det. Higdon to make them aware of the situation. The victim was not removed from life support until late in the evening of January 28, 1997. The autopsy on the victim was performed on January 29, 1997. The results of the autopsy will be included in this case file.

This investigation is continuing.

Respectfully submitted,

Timothy C. Skaggs

Det. Timothy C. Skaggs, #6626
Criminal Investigation Division
Violent Crimes Unit

/baj

SUPPLEMENTARY REPORT

JEFFERSON COUNTY POLICE DEPARTMENT

Offense DEATH INVESTIGATION	Date of Report 02/05/97	Time of Report 2300 HRS.	Report Number #7-003176-R 1
Date of Offense JANUARY 28, 1997	Time of Offense 0030 HRS.	Day of Week TUESDAY	Offense Location L.G. & E. 14660 DIXIE HIGHWAY
Victim JACKSON, WALTER J.	Race/Sex/Age W/M/41/DOB 11/22/55 SS #407-84-4546	Address 6605 MORNING STAR WAY	Phone No. #935-9410

RE: NOTIFICATION / HOSPITAL SCENE /

NOTIFICATION

On January 28, 1997 at 0050 hours, the undersigned, Det. Monty Higdon (#595), was contacted by radio and advised of an accident at the Louisville Gas & Electric plant, located at 14660 Dixie Highway. A worker had been located at the bottom of a condenser unit that he had been cleaning. The victim was being transported to University Hospital and his condition was unknown.

Det. Tim Skaggs (#596) responded to the scene and this detective proceeded to University Hospital to await the arrival of the victim.

HOSPITAL SCENE

I arrived at University Hospital at 0055 hours. The victim had been transported to the hospital by STAT-FLIGHT and was there in Room "9" of the Emergency Room shortly thereafter.

The victim was in a supine position on a long board. He was unconscious and unresponsive at his arrival. The victim was intubated and C.P.R. was being attempted as the victim arrived.

Page - 2
Death Investigation
Walter J. Jackson

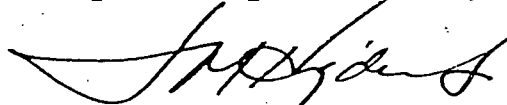
#7-003176-R 1

Upon first observation, the victim appeared to be wet. His hair was wet as were his clothes. He had a laceration to the forehead and abrasions to the nose and right hand. There did not appear to be any other significant outward injuries. The victim was treated in Room "9" where resuscitation was attempted, but without success. The victim was pronounced dead in Room "9" of the Emergency Room.

This concluded this detective's involvement in the investigation.

Investigation continuing.

Respectfully submitted,



Det. J. M. Higdon, #6286
Criminal Investigation Division
Violent Crimes Unit

/baj

JEFFERSON COUNTY POLICE DEPARTMENT
EVIDENCE TECHNICIAN UNIT
EVIDENCE REPORT

I HAVE REVIEWED THIS DOC.
AND IT IS READY TO FILE.

JCB 6626

RPT # 7-003176	TECHNICIAN: Det. Tim Winders	UNIT: 583
DATE: 01-28-97	TIME: 0030	OFFENSE: Death Investigation
VICTIM: Jackson, Walter J.	LOCATION: 14660 Dixie Hwy	
ARRIVAL TIME: 0920	INVESTIGATING OFFICER: Det. T. Skaggs	

DESCRIBED BELOW IS THE ACTION THIS UNIT TOOK IN THE ABOVE STATED OFFENSE:

On Wednesday, 01-29-97, I attended the autopsy of the above named victim. The autopsy took place at the Urban County Government Center. I met in Pathology Department by Doctor L. C. McCloud who would perform the autopsy. The autopsy began at approximately 0920 hours and was completed at 1020 hours. Photographs were taken of the victim. These photographs will be made a part of the E.T.U.'s case file. I cleared pathology at approximately 1030 hours. The following items were collected during the course of autopsy. These items will be entered into evidence as follows:

Ex. #1 - Blood Sample (dried form)

Ex. #2 - Hair Sample (head hair)

Ex. #3 - I. D. Prints

Exhibits #1 and #2 will be placed in the ETU freezer until such time as they are needed. Exhibit #3 will be sent to Metro I. D. Bureau for comparison and elimination from their files. A copy of their report will be made a part of the ETU case file.

In Dr. McCloud's initial report, he lists a history of;

- A. Fall into and submersion in water
- B. Near Drowning
- C. Disseminated Intravascular Coagulation (DIC)

A copy of Doctor McCloud's report will be made a part of the ETU case file.

Respectfully Submitted,



Det. Tim Winders
Evidence Technician Unit

DATE: 01-29-97

/mh

AIR MONITOR RECORD

Rev. 08/30/93
CSir

1. Plant/Unit	MC 4	2. E.I.D. #	
3. Equip. Desc.	UNIT 4 CONDENSOR WATER BOXES 4A1		
4. Space Location/Desc	4 BASE MNT		
5. Space #.		6. W.O. #	H-35406
7. Date	1-27-97		
8. Calibrated Y/N	Y	9. Cal. By	SAMUEL D.V.
10. Work Activity Desc.	SHOOTING CONDENSOR TUBES		
11. Permit Issued Y/N?	N		
12. Engineering Controls			

[illegible]

Attachment E
Copy of Death Certificate

Registrar of Vital Statistics

Certified Copy



THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND - NOT A WHITE BACKGROUND

FORM VS NO. 1-A
(Rev. 11/91)

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HEALTH SERVICES
REGISTRAR OF VITAL STATISTICS

116

FILE NO.

CERTIFICATE OF DEATH

002912

Registrar's No.

MUST
BE
TYPED

DECEDENT

PARENTS

INFORMANT

DISPOSITION

CERTIFIER

CAUSE OF
DEATH

REGISTRAR

1. DECEDENT'S NAME (First, Middle, Last) Walter J. Jackson				2. SEX Male		3. DATE OF DEATH (Month, Day, Year) January 28, 1997	
4. SOCIAL SECURITY NO. 407-84-4546		5a. AGE Last Birthday (Years) 41		5b. UNDER 1 YEAR (Months) (Days)		5c. UNDER 1 DAY (Hours) (Minutes)	
6. DATE OF BIRTH (Month, Day, Year) Nov 22, 1955				7. BIRTHPLACE (City/State or Foreign Country) Louisville, KY			
8. WAS DECEDENT EVER IN U.S. ARMED FORCES? Yes				9a. PLACE OF DEATH (Check only one) <input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Inpatient <input type="checkbox"/> ER/Outpatient <input type="checkbox"/> DCA <input type="checkbox"/> OTHER <input type="checkbox"/> Nursing Home <input type="checkbox"/> Residence <input type="checkbox"/> Other (Specify)			
9b. FACILITY NAME (If not institution, give street and number) University Hospital				9c. CITY, TOWN, OR LOCATION OF DEATH Louisville		9d. COUNTY OF DEATH Jefferson	
10. MARITAL STATUS (Married, Never Married, Widowed, Divorced (Specify)) Married		11. SURVIVING SPOUSE (If wife, give maiden name) Simmons, Diane		12a. DECEDENT'S USUAL OCCUPATION (Give kind of work done during most of working life. Do not use retired) Power Plant Operator		12b. KIND OF BUSINESS/INDUSTRY Utilities Company	
13a. RESIDENCE - State KY		13b. COUNTY Jefferson		13c. CITY, TOWN, OR LOCATION Louisville		13d. STREET AND NUMBER 6605 Morning Star Way	
13e. INSIDE CITY LIMITS? (Yes or No) No		13f. ZIP CODE 40272		14. WAS DECEDENT OF HISPANIC ORIGIN? (Specify No or Yes - If yes, specify Cuban, Mexican, Puerto Rican, etc.) <input type="checkbox"/> No <input type="checkbox"/> Yes		15. RACE - American Indian, Black, White, etc. (Specify) white	
16. DECEDENT'S EDUCATION (Specify only highest grade completed) Elem/Secondary (9-12) College (1-4 or 5+) 12		17. FATHER'S NAME (First, Middle, Last) Charles Hibbs					
18. MOTHER'S NAME (First, Middle, Maiden Surname) Louise Tomes						19. INFORMANT'S NAME Diane Jackson	
20a. METHOD OF DISPOSITION <input type="checkbox"/> Burial <input type="checkbox"/> Cremation <input type="checkbox"/> Removal from State <input type="checkbox"/> Donation <input type="checkbox"/> Other (Specify)						20b. PLACE OF DISPOSITION (Name of cemetery, crematorium, or other place) Louisville Mem. Gardens West	
20c. LOCATION - (City, Town or State) Louisville, Kentucky						21. SIGNATURE OF FUNERAL SERVICE LICENSEE (Or person acting as such)	
22. NAME AND ADDRESS OF FACILITY Owen Funeral Home 5317 Dixie Highway, Louisville, KY 40216						23. DATE SIGNED (Month, Day, Year) 2-6-96	
24. NAME AND ADDRESS OF PERSON WHO COMPLETED CAUSE OF DEATH (ITEM 28) JEFFERSON COUNTY CORONER, 7TH FLOOR, 810 BARRET AVENUE, LOUISVILLE, KY 40204						25. TIME OF DEATH 09:14P	
26. DATE PRONOUNCED DEAD (Month, Day, Year) January 28, 1997						27. WAS CASE REFERRED TO MEDICAL EXAMINER/CORONER? (Yes or No) yes	
28. PART I. Enter the diseases, injuries, or complications that caused the death. Do not enter the mode of dying, such as cardiac or respiratory arrest, shock or heart failure. List only one cause on each line. IMMEDIATE CAUSE (Final disease or condition resulting in death) a. Hypoxic encephalopathy DUE TO IQR AS A CONSEQUENCE OF: near drowning b. DUE TO IQR AS A CONSEQUENCE OF: c. DUE TO IQR AS A CONSEQUENCE OF: d. Sequentially list conditions, if any, leading to immediate cause. Enter UNDERLYING CAUSE (Disease or injury that initiated events resulting in death) LAST PART II. Other significant conditions contributed to death but not resulting in the underlying cause given in Part I.							
29. MANNER OF DEATH <input type="checkbox"/> Natural <input type="checkbox"/> Pending Investigation <input checked="" type="checkbox"/> Accident <input type="checkbox"/> Suicide <input type="checkbox"/> Could not be determined <input type="checkbox"/> Homicide		30a. DATE OF INJURY (Month, Day, Year) Jan. 28, 1997		30b. TIME OF INJURY approx. 12:30 A. M.		30c. INJURY AT WORK? (Yes or No) yes	
30d. DESCRIBE HOW INJURY OCCURRED. fell from catwalk into water		30e. PLACE OF INJURY - At home, farm, street, factory, office building, etc. (Specify) Utility plant		30f. LOCATION (Street and number or Rural Route Number, City or Town) 14660 Dixie Highway Louisville, KY			
31. REGISTRAR'S SIGNATURE Barbara F. White						32. DATE FILED (Month, Day, Year) FEB 10 1997	



THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK - HOLD AT AN ANGLE TO VIEW

I, Barbara F. White, State Registrar of Vital Statistics, hereby certify this to be a true and correct copy of the certificate of birth, death, marriage or divorce of the person therein named; and that the original certificate is registered under the file number shown. In testimony thereof I have hereunto subscribed my name and caused the official seal of the Office of Vital Statistics to be affixed at Frankfort, Kentucky this 10th day of Feb, 1997.

Barbara F. White